

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appellant: Xin Yao

Application No.: 10/593,524

§ 371(c) Date: July 29, 2008

For: METHOD AND APPARATUS FOR  
IMPLEMENTING SIGNALING PROXY

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Group Art Unit: 2441

Examiner: Ruolei Zong

Confirmation No.: 2772

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**CERTIFICATE OF EFS-WEB FILING**

Pursuant to 37 C.F.R. §1.8, I hereby certify that this  
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*March 21, 2011*

  
Jerri Pearson

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**REPLY BRIEF**

Dear Sirs:

This Reply Brief is filed in support of the appeal in the above-referenced application and is filed pursuant to the Notice of Appeal filed on July 15, 2010, the Pre-Appeal Panel Decision dated September 9, 2010, and the Examiner's Answer dated January 21, 2011. The Appellant authorizes all required fees under 37 C.F.R. § 1.17 to be charged to Deposit Account No. 50-1515, of Conley Rose, P.C. of Texas.

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**I. STATUS OF CLAIMS**

**A. Total Number of Claims in the Application**

Claims in the application: 1-28.

**B. Status of All Claims in the Application**

1. Claims canceled: 2, 3, 6, 7, 9, 10, 12, 15-20, and 25-27.
2. Claims withdrawn from consideration but not canceled: None.
3. Claims pending: 1, 4, 5, 8, 11, 13, 14, 21-24, and 28.
4. Claims allowed: None.
6. Claims objected to: None.
5. Claims rejected: 1, 4, 5, 8, 11, 13, 14, 21-24, and 28.

**C. Claims on Appeal**

Claims on appeal: 1, 4, 5, 8, 11, 13, 14, 21-24, and 28.

**II. GROUND FOR REJECTION TO BE REVIEWED ON APPEAL**

1. Whether claims 1, 11, 22 and 23 are anticipated under 35 U.S.C. § 102(b) by U.S. Patent 6,754,709 (*Gbadegesin*).
2. Whether claim 24 is anticipated under 35 U.S.C. § 102(e) by U.S. Patent 7,146,410 (*Akman*).
3. Whether claims 4 and 13 are rendered obvious under 35 U.S.C. § 103(a) by *Gbadegesin* in view of U.S. Patent Application Publication 2002/0021688 (*Chen*)
4. Whether claims 5 and 14 are rendered obvious under 35 U.S.C. § 103(a) by *Gbadegesin* in view of *Chen* and *Akman*.
5. Whether claim 8 is rendered obvious under 35 U.S.C. § 103(a) by *Gbadegesin* in view of *Akman*.
6. Whether claim 21 is rendered obvious under 35 U.S.C. § 103(a) by *Gbadegesin* in view of *Akman* and U.S. Patent 7,574,522 (*Oguchi*).
7. Whether claim 28 is rendered obvious under 35 U.S.C. § 103(a) by *Akman* in view of *Oguchi*.

### III. ARGUMENTS

- A. *Gbadegesin* fails to anticipate claims 1, 11, 22, and 23 because *Gbadegesin* fails to teach that a SP processes a message if the DA of the message is different than a SP address and an address for which the message is intended.

*Gbadegesin* fails to anticipate claims 1, 11, 22, and 23 because *Gbadegesin* fails to teach that a signaling proxy (SP) processes a message if the destination address (DA) of the message is different than a SP address and an address for which the message is intended. Claims 1 and 11 read:

1. A method, comprising:  
receiving a message by a signaling proxy (SP), wherein the message has a source address and a destination address;  
processing the message if the destination address of the message is different than a SP address and an address for which the message is intended; and  
sending the message.
11. A signaling proxy (SP) apparatus, comprising:  
a receiving unit configured to receiving a message, wherein the message has a source address and a destination address;  
a processing unit configured to process the message if the destination address of the message is different than a SP address and an address for which the message is intended; and  
a sending unit configured to send the message.

(Emphasis added). As shown above, claims 1 and 11 require that a SP processes a message if the DA of the message is different than a SP address and an address for which the message is intended. The Examiner asserts that *Gbadegesin's* col. 11, ll. 43-61 discloses that a SP processes a message if the DA of the message is different than a SP address *and* an address for which the message is intended. See Examiner's Answer dated January 21, 2011 (*Answer*), p. 14. However, the cited section of *Gbadegesin* discloses an SP that processes a message if a dynamic redirect exists, not an SP that process a message if the DA of the message is different than a SP address *and* an address for which the message is intended:

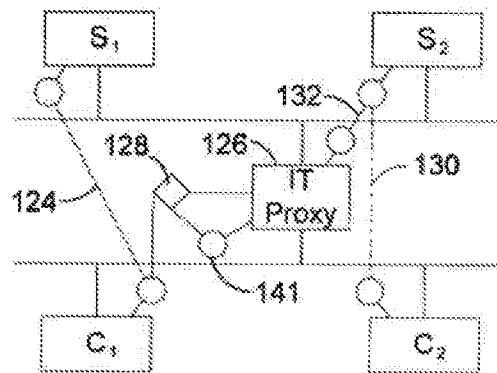


FIG. 12

A further dynamic redirection that may be commanded by the intelligent transparent proxy of the instant invention is illustrated in FIG. 12. A client  $C_1$  may wish to establish a session with server  $S_1$  by addressing messages thereto. This is the apparent session from the client  $C_1$ 's point of view, as illustrated by the dashed line 124. However, when the gNAT machine 126 detects the message from  $C_1$  addressed to  $S_1$ , it checks to determine if a dynamic redirect exists for such a session as discussed above. As illustrated in FIG. 12, a dynamic redirect 128 does exist to forward the message to the proxy session 141. The proxy may include a translation of both the source and destination addresses such that the messages are actually forwarded by the proxy to server  $S_2$  with an indication that the source was  $C_2$ . From the server  $S_2$ 's point of view, an apparent session 130 has been established between  $S_2$  and  $C_2$ . The actual session 132 that has been established is between  $C_1$  and  $S_2$ , although neither  $C_1$  nor  $S_2$  knows that this is the case. Each of the required translations is accomplished transparently.

*Gbadegesin*, FIG. 12 & col. 11, ll. 43-61 (emphasis added). As shown above, *Gbadegesin's* gNAT (i.e. his SP) processes a message sent from a first client ( $C_1$ ) to first server ( $S_1$ ) if a dynamic re-direct exists for that message. Upon determining that a dynamic redirect exists for that message, *Gbadegesin's* gNAT translates the message's source address (SA) and DA to indicate a second customer ( $C_2$ ) and a second source ( $S_2$ ), respectively, and forwards the message to  $S_2$ . More importantly, when *Gbadegesin's* gNAT receives the message from the first client ( $C_1$ ), the DA of the message is  $S_1$ . Thus, the DA is the same as the address for which the message is intended.

The Examiner asserts that the limitation “an address for which the message is intended” can be broadly interpreted to include an address to where a *proxy* intends to forward the message. *See Answer*, pp. 17-19. In response, the Appellant asserts that if the limitation “an address for which the message is intended” is interpreted as an address to where a proxy intends to forward the message, then *Gbadegesin* no longer discloses the claimed limitation. Specifically, claims 1 and 11 are directed to an SP that processes the message if the DA of the message is different than an address for which the message is intended. In other words, “an address for which the message is intended” must be known before the SP processes the message. *Gbadegesin*’s gNAT machine is unaware of the address for which the proxy intends for the message until after at least some initial processing of the message (i.e. reading the DA and/or other info and determining whether dynamic redirect exists for the session):

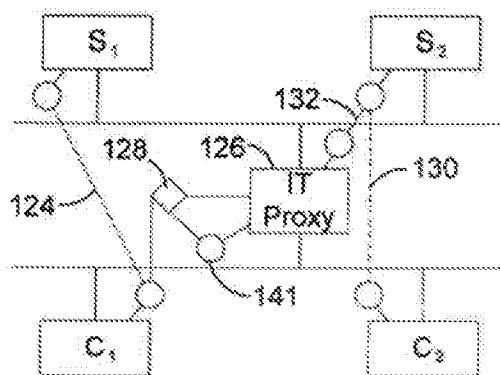


FIG. 12

A further dynamic redirection that may be commanded by the intelligent transparent proxy of the instant invention is illustrated in FIG. 12. A client  $C_1$  may wish to establish a session with server  $S_1$  by addressing messages thereto. This is the apparent session from the client  $C_1$ 's point of view, as illustrated by the dashed line 124. However, when the gNAT machine 126 detects the message from  $C_1$  addressed to  $S_1$ , it checks to determine if a dynamic redirect exists for such a session as discussed above. As illustrated in FIG. 12, a dynamic redirect 128 does exist to forward the message to the proxy session 141. The proxy may include a translation of both the source and destination addresses such that the messages are actually forwarded by the proxy to server  $S_2$  with an indication that the source was  $C_2$ . From the server  $S_2$ '[s] point of view, an apparent session 130 has been established between  $S_2$  and  $C_2$ . The actual session 132 that has been established is between  $C_1$  and  $S_2$ , although neither  $C_1$  nor  $S_2$  knows that this is the case. Each of the required translations is accomplished transparently.

*Gbadegesin*, FIG. 12 & col. 11, ll. 43-61 (emphasis added). As shown above, *Gbadegesin*'s gNAT machine is unaware of the address for which the proxy intends for the message until after at least some initial processing of the message, such as reading the DA and/or other info and determining whether dynamic redirect exists for the session. Thus, the address for which *Gbadegesin*'s gNAT (the proxy) intends to forward the message is not known when determining whether the DA of the message is different than an address for which the message is intended.<sup>1</sup> Thus, the limitation "an address for which the message is intended" cannot be reasonably interpreted as an address to where the SP intends to forward the message. As such, *Gbadegesin* fails to teach at least one limitation of independent claims 1 and 11, and consequently fails to anticipate claims 1, 11, 22, and 23.

**B. *Akman* fails to anticipate claim 24 because *Akman* fails to teach a SP located between a terminal and a server.**

*Akman* fails to anticipate claim 24 because *Akman* fails to teach a SP located between a terminal and a server. Claim 24 reads:

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<sup>1</sup> In other words, the proxy processes the message to, *inter alia*, determine where to forward the message. Therefore, it cannot know an address for which the SP intends to send the message prior to processing the message.



24. A system, comprising:

**a signaling proxy (SP) located between a terminal and a server;** and  
a router located between the terminal and the SP,

wherein the SP is configured to receive a message and process the message if at least one of a VPN ID, a VLAN ID, a MPLS ID, an IP protocol type, a source address, or a source port of the message meets a strategy of the SP;  
and

wherein the router is configured to forward the message to the SP according to a forwarding strategy.

(Emphasis added). As shown above, claim 24 requires a SP located between a terminal and a server. The Examiner contends that *Akman's* MEGACO NAT server 170 corresponds to the claimed SP, *Akman's* media gateway (MG) 130 corresponds to the claimed terminal, and *Akman's* media gateway controller (MGC) 110 corresponds to the claimed server, and that the signaling in *Akman's* FIG. 2B indicates that the SP is located between the terminal and the server. See *Answer*, p. 19. However, the Appellant notes that the physical connectivity, not the message exchange is claimed in claim 24. The Examiner attempts to rectify such a shortcoming by stating that the physical connectivity is not claimed in claim 24. See *id*, p. 20. However, claim 24 uses the term “between,” which requires the SP to separate the terminal and the server. Specifically, the relevant dictionary definition of the term “between” is “2.a: in the time, space, or interval that separates.” *Merriam-Webster Collegiate Dictionary*, 10<sup>th</sup> Ed., p. 109. As shown in *Akman's* FIGS. 1B and 2B, his MEGACO NAT does not separate his MGC from his MG:

FIG. 1B

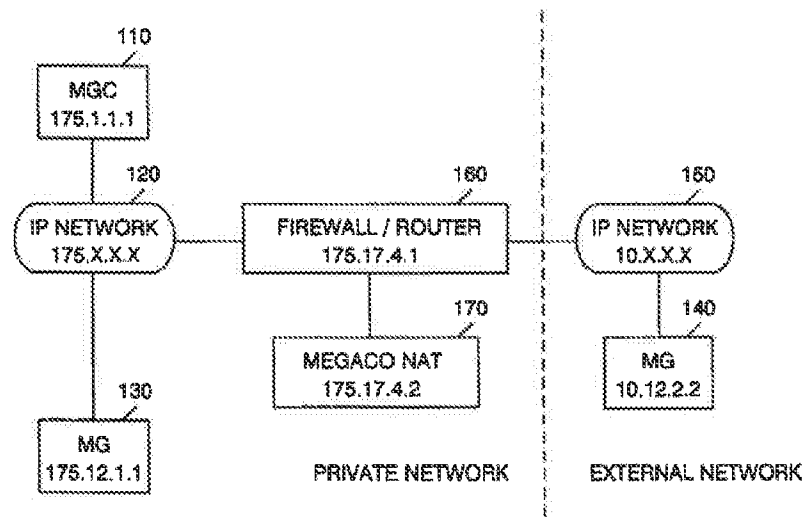
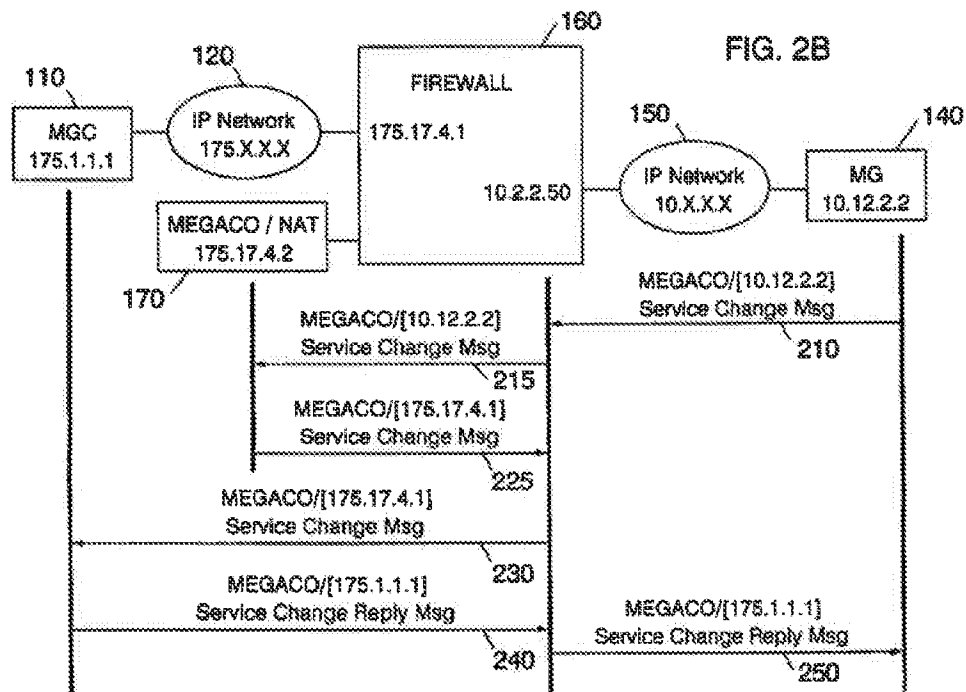


FIG. 2B



*Akman*, FIGS. 1B & 2B. As shown above, *Akman's* MEGACO NAT does not separate his MGC from his MG. Thus, *Akman* fails to teach a SP located between a terminal and a server. As such,

*Akman* fails to teach at least one element of independent claim 24, and consequently fails to anticipate claim 24.

**C. The cited prior art does not render obvious claims 4, 5, 8, 13, 14, 21 and 28 because the combinations fail to disclose all the limitations of these claims.**

Claims 4 and 13 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Gbadegesin* in view of U.S. Patent Application Publication 2002/0021688 (*Chen*). Claims 5 and 14 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Gbadegesin* in view of *Chen* and *Akman*. Claim 8 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over *Gbadegesin* in view of *Akman*. Claim 21 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over *Gbadegesin* in view of *Akman* and U.S. Patent 7,574,522 (*Oguchi*). Claim 28 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over *Akman* in view of *Oguchi*. Claims 4, 5, 8, and 21 depend from independent claim 1, claims 13 and 14 depend from independent claim 11, and claim 28 depends from independent claim 24. Claims 1, 11, and 24 are allowable over the cited prior art for the reasons discussed above, thus claims 4, 5, 8, 13, 14, 21, and 28 are also allowable.

**IV. CONCLUSION**

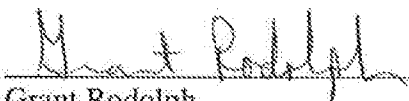
In view of the above arguments, the Appellant respectfully requests that the rejection of the claims be reversed and the case advanced to issue. If the Examiner feels that a telephone interview would advance prosecution of the instant application, then the Appellant invites the Examiner to call the attorneys of record.

The Commissioner is hereby authorized to charge payment of any further fees associated with any of the foregoing papers submitted herewith, or to credit any overpayment thereof, to Deposit Account No. 50-1515, of Conley Rose, P.C. of Texas.

Respectfully submitted,  
CONLEY ROSE, P.C.

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